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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,067	12/29/2003	Norman Robert Russell	10003891-4	3364

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

MIZRAHI, DIANE D

ART UNIT	PAPER NUMBER
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2165

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/749,067

Applicant(s)

RUSSELL, NORMAN ROBERT

Examiner

DIANE D. MIZRAHI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 32-59, 61 and 62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-59 and 61-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### III. DETAILED ACTION

Claims 32-59 and 61-62 are presented for examination.

#### Claim Objections

Claim 61-62 are objected to because of the following informalities: Both claims appear to be identical. Appropriate correction is required.

#### Claim Rejections - 35 USC 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

Claims 32-59 and 61-62 are rejected under 35 U.S.C. 101 because the claims are directed to a non-statutory subject matter, specifically, the claims are not directed towards the final result that is “useful, tangible and concrete.

See State Street, 149 F.3d at 1373-74 USPQ2d at 1601-02 and Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557). The decisions state to be eligible for patent protection, the claimed invention as a whole must accomplish a practical application. A claim limited to a machine or manufacture, which has a practical application, is statutory. Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557). That is, it must produce a “useful, concrete and tangible result”. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of “real world” value as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383

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U.S. 519, 528-36, 148 USPQ 689, 693-96 (1966); In re Fisher, 421 F.3d 1365, 76 USPQ 2d 1255 (Fed. Cir. 2005); In re Ziegler, 992 F.2d 1197, 1200-03, 26 USPQ 2d 1600, 1603-06(Fed. Cir.1993).

Claims 32-59 and 61-62 represent an abstract idea and does not provide for manipulation of data nor is there any transformation of data from one state to another state being performed in “a data model table structure... setting ... added (claim 32) and includes... associated... added...”(claim 46). Actually, no post-computer process activity is found in the technological arts which indicates a physical transformation. Thus, no physical transformation is performed, no practical application is found. Also, the claims do not appear to correspond to a specific machine or manufacture disclosed within the specification and thus encompass any product of the class configured in any manner to perform the underlying process. Consequently, the claims are analyzed based upon the underlying process, and are thus rejected as being directed. There appears to be no generating or production of any useful, concrete, and tangible results. Examiner recommends Applicant to amend the claims without adding any new matter to the originally filed specification.

Examiner contends that to satisfy the 101 rejection, and to be “useful”, the claim must satisfy the utility requirement thus the invention has to be specific, substantial and credible. (MPEP 2107 and In re Fisher, 421 F.3d 1365, 76 USPQ 2d 1255 (Fed. Cir. 2005); that the claims must produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77; and that the process must have a result that can be substantially repeatable or must substantially produce the same result again. In re Swartz, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000).

**Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 32-59 and 61-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 32-59 and 61-62, Examiner is unclear as to what Applicant intends to mean by the claimed, "entity" see claim 32 (line 3) for example. For the purposes of examining, the claimed, "entity" will be given the broadest interpretation. Further clarification is required.

Regarding Claim 37, the phrase "can be" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding Claims 35, 38, 40, 42, 44-45, 52, 54, 56, 58-59, Examiner is unclear what Applicant intended with the claimed limitation, "particular". For the purposes of examining, the claimed, "entity" will be given the broadest interpretation. What constitutes what is "particular" and "not particular"? Further clarification is required.

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 32-59 and 61-62 are rejected under 35 U.S.C. 102(e) as being anticipated by

Murali Krishna (US Patent No. 5,412,804 and Krishan hereinafter).

Regarding Claims 32 and 46, Krishan teaches setting an entity in an entity table (i.e. table) (Detailed Description, paragraph 6); setting an attribute in an attribute table (i.e. attribute name) (Detailed Description, paragraph 7), where the attribute is a property associated with the entity (i.e. index 54 to the relation "R" of the first table 51, and an index 55 to the relation "S" for the second table 52. The index 54 to the relation "R" includes a name ("R") for the relation and a name ("a", "b", "c", "d", "e", "f", "g") for each attribute corresponding to each column of the table R, and the index 55 to the relation "S" includes a name ("S") for the relation and a name ("h", "i", "j", "k", "l") for each attribute corresponding to each column of the table 52. The indices 54 and 55, for example, permit a numerical pointer or address to be obtained to a table and column specified by a relation name and an attribute name) (Detailed Description, paragraph 8); and setting an attribute value in an attribute values table (Detailed Description, paragraph 8), where the attribute value is associated with the attribute (i.e. name ("a", "b", "c", "d", "e", "f", "g") for each attribute corresponding to each column of the table R, and the index 55 to the relation "S" includes a name ("S") for the relation and a name ("h", "i", "j", "k", "l") for each attribute corresponding to each column of the table) (Detailed Description, paragraph 8); wherein an attribute value is added or modified by adding data or modifying data in the attribute table (i.e. predicate is tested for value from the rows R.sub.i (P.sub.i) (Detailed Description, paragraph 38);

Regarding Claims 33 and 47, Krisha teaches wherein the attribute value is a row of property in the attribute table (i.e. value from the rows R.sub.i (P.sub.i)) (Detailed Description, paragraph 38).

Regarding Claims 34 and 48, Krisha wherein at least one of the entity table, attribute table, and attribute values table includes a column identifier (i.e. relation and a name ("h", "i", "j", "k", "l") for each attribute corresponding to each column of the table) (Detailed Description, paragraph 8).

Regarding Claims 35 and 49, Krisha teaches wherein the column identifier comprises a first symbol (#) indicating that a column is a primary key (i.e. surrogate column having a distinct value for each tuple or row. Such an attribute will be designated by "#") (Detailed Description, paragraph 80).

Regarding Claims 36 and 50, Krishn teaches wherein the column identifier comprises a second symbol (\*) indicating that a column is mandatory for every record in a table that contains the second symbol (i.e. (\*) will have a value) (Detailed Description, paragraph 71).

Claim 37 (Previously presented): The method of claim 32, wherein an attribute can be added, deleted, or modified without a change to a database schema of the data model table structure (i.e. The schema 53 is further subdivided into an index for each relation, such as an index 54 to the relation "R" of the first table 51, and an index 55 to the relation "S" for the second table 52. The index 54 to the relation "R" includes a name ("R") for the relation and a name ("a", "b", "c", "d", "e", "f", "g") for each attribute corresponding to each column of the table R, and the index 55 to the relation "S" includes a name ("S") for the relation and a name

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("h", "i", "j", "k", "l") for each attribute corresponding to each column of the table 52) (Detailed Description, paragraph 8).

Regarding Claims 38-45 and 51-62, these claims are similar in scope to the rejected claims above and are therefore rejected as set forth above.

**Other Prior Art Made of Record**

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. U.S. patents and U.S. patent application publications will not be supplied with Office actions. Examiners advises the Applicant that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site ([www.uspto.gov](http://www.uspto.gov)), from the Office of Public Records and from commercial sources. For the use of the Office's PAIR system, Applicants may refer to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diane D. Mizrahi whose telephone number is 571-272-4079. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone numbers for the



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organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 305-3900 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

A handwritten signature in black ink, appearing to be "Diane Mizrahi", written over a horizontal line.

Diane Mizrahi  
Primary Patent Examiner  
Technology Center 2100

January 23, 2007